

# **AGRICULTURAL SAFETY AND HEALTH INSPECTION PROJECT**

**Report of 1999 Activities**

**Cal/OSHA PROGRAM**

**DIVISION OF OCCUPATIONAL SAFETY AND HEALTH  
CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS**

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## **I. BREAKTHROUGH PROJECT**

### **A. DIR Strategic Planning**

In mid-1999, the Director of the Department of Industrial Relations (DIR), Stephen J. Smith, began a Strategic Planning Process involving all Divisions, Boards and Commissions within DIR. The short-term goal was for each Division, Board and Commission to identify a 90-day project which would support one of the DIR Strategic Goals and challenge the particular Division, Board or Commission to achieve a higher level of performance in the same activity area than that achieved during the same time period in the previous year.

The Division of Occupational Safety and Health (DOSH) determined that it would design a project to support the DIR Strategic Goal of employer compliance with health and safety regulations, specifically compliance with occupational safety and health regulations affecting the agricultural industry.

The DOSH determined that the general goal of increased compliance could be supported by both consultative educational outreach activities and by enforcement activities.

### **B. DIR Strategic Goal Supported by DIR Breakthrough Project**

The DIR Strategic Planning Goal supported by the DOSH 90-Day Project was compliance, through both consultative educational outreach activities and enforcement activities.

### **C. DOSH Challenge ASHIP Addressed**

#### **1. Agriculture As A Hazardous Industry**

Agricultural production is one of the four most hazardous industrial activities in California (i.e., mining, construction, agriculture and manufacturing). Despite the large number of hazards present in agriculture, Cal/OSHA receives few complaints from agricultural employees. This may be due in large part to

the fact that agricultural workers are largely a migrant workforce without ready access to governmental agencies such as Cal/OSHA; are generally fearful of interaction with governmental agencies, even with ones like Cal/OSHA that are mandated to protect them; and may not be familiar with their rights as employees to file a complaint with governmental agencies such as Cal/OSHA.

Since Cal/OSHA is a complaint and accident-driven system, Cal/OSHA invests proportionately less enforcement resources in agricultural inspections than it does in other hazardous industries, like construction or manufacturing, industries from which the agency receives many more employee complaints.

During the summer and fall seasons, agricultural production activities are at their yearly peak and a large number of employees are exposed to serious occupational safety and health hazards.

## 2. Agricultural Hazards

Agricultural hazards to which employees are exposed include, but are not limited to:

### a. Machinery and Tractor Hazards

Agricultural workers often get caught in power transmission lines, such as belts and pulleys, running rolls, chains and sprockets--sometimes when reaching past guards or when machinery starts up unexpectedly. Common tasks involving risk include: clearing a jammed conveyor; making quick adjustments; adjusting and cleaning pneumatic cutters; retrieving dropped objects; and reaching for tools and other equipment components.

b. Field Sanitation Hazards

According to Title 8, California Code of Regulation, Section 3457, employers must provide water for drinking, water for handwashing and toilet facilities for their workers in the field. Employers are required to notify each worker of the location of water and toilet facilities and to allow the workers reasonable opportunity during the workday to use the facilities.

c. Heat Stress Hazards

Agricultural workers during the hot summer months are at risk of heat stress and employers must provide plenty of cool, potable water and ensure that all workers drink plenty of the water throughout the workday. Employers should schedule frequent cool-down breaks and time the heaviest workload during the coolest part of the day and provide a working environment that encourages workers to break for water and cool-down periods.

d. Musculoskeletal (Back) Injury Hazards

Using short handled tools (less than four feet in length) for weeding, thinning and other similar work while in a kneeling or squatting position is prohibited. Employers must also ensure that workers using long-handled tools are not grabbing the tools from the base (as a short-handled tool) causing them to bend

and stoop. Prolonged stooping and bending puts stress on the lower spine and can result in a repetitive stress injury.

e. Skin Disorder Hazards

Many agricultural workers are exposed to hazards that result in lacerations, contusions, and dermatitis from soil contaminants, including fertilizers and pesticides. The key to reducing injuries and illnesses is education and training, immediate first aid, and following safe work practices, including the provision of safe tools and gloves when needed.

## **II. ASHIP: 90-DAY INITIAL PHASE**

### **A. ASHIP Proposal**

In early July of 1999, the Division of Occupational Safety and Health proposed to conduct a Summer/Fall Agricultural Safety and Health Inspection Project, named ASHIP. The 1999 ASHIP would commence on 12 July 1999 and conclude on 12 October 1999.

### **B. Initial ASHIP Goals**

The initial goals of the Summer/Fall 1999 ASHIP were as follows:

#### **1. Enforcement Activity Goal**

ASHIP had an enforcement activity goal of a 25% increase in the number of programmed inspections conducted in agricultural production worksites (SIC Code Major Group 01) during the July through October 1999 ninety day period of time over the number of inspections conducted from July through October of 1998.

In 1998, 186 inspections were conducted in agriculture from 12 July through 12 October 1998. A 25% increase was equivalent to an additional 46 inspections. The ASHIP Initial Phase Goal was to conduct 232 inspections from 12 July through 12 October of 1999.

#### **2. Consultation Activity Goal**

ASHIP has a consultation activity goal of a 25% increase in the number of outreach sessions for agricultural growers and farm labor contractors during the July through October 1999 ninety day period of time over the number of outreach sessions conducted by the Cal/OSHA Consultation Service conducted from July through October of 1998. Outreach sessions include on-site presentations to growers and farm labor contractors, direct outreach to Spanish-speaking farm laborers through radio and television presentations, and development

of an ASHIP publication in English and Spanish.

3. Efficacy Goal

ASHIP also had an efficacy of a 25% reduction in the number of agricultural fatalities and serious injuries that occurred during the 12 July through 12 October 1999 period over those fatalities and serious injuries that occurred from 12 July through 12 October of 1998.

**C. Initial ASHIP Coordinators & Team Leaders**

1. ASHIP Enforcement Activities

The Division designated William Krycia, Region II Regional Manager, as Coordinator for ASHIP Enforcement Activities. Four enforcement team leaders were designated from each of the four Cal/OSHA Enforcement Unit Regions with significant agricultural activities:

- a. Sacramento/Fresno Area -- William Estakhri, Sacramento District Manager
- b. San Jose/Salinas Area -- Ralph Allen, San Jose District Manager
- c. Ventura/Santa Maria Area -- Ginger Henry, Ventura District Manager
- d. San Diego/Imperial Area -- Luis Mireles, San Diego District Manager

Each of the four-team leaders headed enforcement teams composed of from four to ten Cal/OSHA engineers and industrial hygienists.



## 2. ASHIP Consultation Activities

The Division designated Michael Alvarez, Consultation Service Education Unit Manager, as the Coordinator for ASHIP consultative activities.

### **D. ASHIP Information Dissemination**

#### 1. Internal Communication

Information about ASHIP will be communicated to involved Cal/OSHA employees through multiple training sessions for ASHIP Team Leaders and team members throughout the duration of ASHIP. Internal communication to DIR employees not involved in ASHIP is conducted through annual reports.

#### 2. External Communication

Information about ASHIP, and solicitation of suggestions about how to improve the ASHIP, is through communication with representatives of agricultural grower and farm labor contractor associations, representatives of farm workers, representatives of state and local governmental agencies involved with agricultural production activities.

### **E. Initial ASHIP Timeline**

ASHIP began on 12 July and was scheduled to conclude 90 days later on 12 October 1999.

### **F. Monitoring**

Monitoring of ASHIP enforcement and consultative activities was through data collection by the enforcement and consultation Coordinators on a weekly and monthly basis. A Report was to be prepared summarizing the ASHIP 90-day activities.

## **G. Initial ASHIP Results**

### **1. Enforcement**

#### **a. Inspections Conducted**

During July through October of 1998, 186 inspections were conducted in agriculture.

During July through October of 1999, 313 inspections were conducted as a part of ASHIP. ASHIP inspections conducted represents an increase of 127 inspections (or a 68% increase over 1998). The ASHIP goal of a 25% increase was achieved and exceeded by 81 inspections.

#### **b. Violations Alleged in Citations Issued**

During July through October of 1999 as a part of ASHIP, a total of 475 violations were observed--90 serious and 385 other-than-serious (regulatory or general) violations.

During the same period in 1998 (July through October), a total of 250 violations were observed--28 serious and 222 other-than-serious violations.

Serious violations increased from 28 to 90 during July to October of 1999 as compared to the same period of time in 1998--a 221% increase.

In 1998, the violation-per-inspection ratio (measure of enforcement productivity) was 1.34. In 1999, the violation-per-inspection ratio increased to 1.52. The Division average is approximately 2.3 violations per inspection.

#### **c. Proposed Civil Penalties**

During July through October of 1999, a

total of \$197,915 in civil penalties were proposed for 475 violations as compared to a total \$67,080 proposed in 1998 for 250 violations. Total proposed civil penalties increased in 1999 over the same July to October period in 1998 by 195%.

Average proposed penalty per violation in 1998 was \$268.32, and in 1999 was \$416.66.

**TABLE ONE**

**90-DAY ASHIP ENFORCEMENT RESULTS AS  
COMPARED TO SAME PERIOD OF TIME IN 1998**

|                              | <b>1998<br/>July - October</b> | <b>1999 ASHIP<br/>July-October</b> |
|------------------------------|--------------------------------|------------------------------------|
| <b>Total<br/>Inspections</b> | <b>186</b>                     | <b>313</b>                         |
| <b>Total Violations</b>      | <b>250</b>                     | <b>475</b>                         |
| <b>Serious</b>               | <b>28</b>                      | <b>90</b>                          |
| <b>Non-serious</b>           | <b>222</b>                     | <b>385</b>                         |
| <b>Total Penalties</b>       | <b>\$67,080</b>                | <b>\$197,915</b>                   |
| <b>Average Penalty</b>       | <b>\$268.32</b>                | <b>\$416.66</b>                    |

## 2. Consultation

### a. On-Site Visits

During July through October of 1998, 4 consultation visits were conducted in agriculture and 25 hazards were found.

During the same 90-day period in 1999, 11 consultation visits were conducted and 77 hazards were observed and corrected, which represents a 275% increase for consultation visits and 308% increase for hazards observed and corrected.

### b. Outreach Presentations

During July through October of 1998, 4 outreach presentations were conducted in agriculture. Approximately, 125 employers and 1,740 employees were affected. Subject/topics included field sanitation, farm safety and the Injury and Illness Prevention (IIP) Program.

During July through October of 1999, 7 outreach presentations and workshops were conducted in agriculture—a 175% increase as compared to 1998. Over 724 employers and 12,700 employees were affected—a 579 % (employers) and 747% (employees) increase over 1998.

Subject/topics mainly focused on ASHIP and included IIP Programs and materials in the Cal/OSHA Farm Labor Contractors Health and Safety Guide. The ASHIP goal of 25% increase was achieved and exceeded.

c. Radio/Television Presentations

In July and August of 1999, two one-hour radio announcements were made to inform both employers and workers (over 60,000 listeners) on Cal/OSHA and health and safety responsibilities. This was done through the Spanish radio public show, ***Línea Abierta***. No radio or television presentations were done in 1998.

d. Publication Development and Dissemination

During July of 1999, the Education Unit of the Consultation Service developed an ASHIP publication entitled in English "Cal/OSHA Agricultural Safety and Health Inspection Project," and in Spanish, "Proyecto de Inspecciones para la Seguridad y Salud en la Agricultura."

See Appendix A.

The dual color 10-page publication focused on the mission of ASHIP and its five key areas of health and safety and ten thousand copies were printed in September of 1999. Approximately half (5,000) copies were immediately mailed to all the Cal/OSHA Enforcement District and Consultation Area Offices, Division of Labor Standards Enforcement (DLSE) Offices, agricultural service providers, and to insurance/brokers, farm grower and labor contractor associations, county agricultural commissioners, and the California Rural Legal Assistance (CRLA) offices.

The publication was also made available in the Cal/OSHA statewide health and safety publication distribution list. In addition to the ASHIP publication, the Farm Labor Contractor Health and Safety Guide (English and Spanish—65

page booklet) was also distributed during scheduled agricultural seminars and presentations.

e. Educational Outreach

During 1999, over 50 presentation resource binders for health and safety in agriculture were developed in both Spanish and English. The binders were distributed to all consultation offices and several agricultural health and safety providers and groups. The purpose of this binder is to provide a variety of tools that will aid in conducting outreach presentations and workshops. The binders included speaker instructions, PowerPoint color presentation slides with note pages, sample health and safety publications (FLC and ASHIP), order forms and Compact Disc.

During July through December of 1999, using the presentation binders, workers comp representatives gave five presentations that affected over 300 employers and 6000 employees. In addition, over 900 Cal/OSHA publications that included IIP Model Programs, FLC guides and ASHIP were distributed during these presentations. In addition, thousands of news letters informing agricultural employers and workers of ASHIP and other outreach efforts were distributed statewide by various agriculture associations, workers comp carriers and brokers.

### 3. Efficacy

Assessment of overall efficacy for ASHIP 1999 will be accomplished by means of measuring:

- a. The percentage change in fatal and non-fatal injuries in establishments included in agricultural Standard Industrial Classification (SIC) Codes from 1998 (entire year) to 1999 (entire year); and
- b. The percentage change in non-fatal injuries in establishments included in agricultural SIC Codes from 1998 to 1999.

It is not possible to measure efficacy in any smaller time period than a calendar year.

The California Census of Fatal Occupational Injuries (CFOI) indicates that in 1998, 62 fatal injuries occurred in agriculture (24 in crop production, 5 in livestock production and 33 in agricultural services). Data for CFOI for 1999 fatal injuries is currently being collected and will be available in the fall of 2000. An addendum to the 1999 ASHIP Report will be made at the October 2000 Cal/OSHA Advisory Committee Meeting.

For nonfatal injuries, the California Survey of Nonfatal Occupational Injuries and Illnesses indicates that in 1998, 30,500 total occupational injury and illness cases with lost workdays occurred in 1998 (10,900 in agricultural crop production and 19,600 in agricultural services). Data for the California Survey of Nonfatal Injuries and Illnesses is currently being collected and will be available in early 2001. An addendum to the 1999 ASHIP Report will be made at the January 2001 Cal/OSHA Advisory Committee.

### **III. ASHIP: 180 DAY EXTENSION**

#### **A. Extension to December 1999**

Based on the Division's experience with the increased number of inspections conducted during the initial 90-day ASHIP (July through October 1999), and the fact that the spring and summer growing season had begun later than usual in 1999 because of unusually cool spring and summer climate conditions, the Division of Occupational Safety and Health determined in early October of 1999 that it would extend its initial 90-day ASHIP to the end of 1999 (December 1999), i.e., extending ASHIP to a total of 180 days.

#### **B. 180 Day ASHIP Results**

##### **1. Enforcement Activities**

###### **a. Inspections Conducted**

From July through December of 1999, 505 inspections were conducted in agriculture. During July through October of 1998, only 218 inspections were conducted.

Thus, the 180-day ASHIP represents an increase of 287 inspections (or a 132% increase over 1998).

###### **b. Violations Alleged in Citations Issued**

During July through December of 1998, a total of 283 violations were observed--30 serious and 253 other-than-serious (regulatory and general) violations.

In 1999 as a part of the 180-day ASHIP, a total of 749 violations were observed--136 serious and 613 other-than-serious violations.



Serious violations increased from 30 in 1998 (July to December) to 136 during 1999 (July through December) -- a 353% increase.

In 1998, the violation-per-inspection ratio was 1.30, and in 1999, the violation-per-inspection ratio was 1.48.

c. Proposed Civil Penalties

During July through October of 1998, a total of \$78,520 in civil penalties were proposed for 283 violations as compared to a total \$349,410 proposed in 1999 for 749 violations. Proposed civil penalties increased during July to December of 1999 as compared to 1998--a 345% increase.

In 1998, the average proposed penalty per violation was \$277.45 and in 1999, it was \$466.50.

**TABLE TWO**

**180-DAY ASHIP ENFORCEMENT RESULTS AS  
COMPARED TO SAME PERIOD OF TIME IN 1998**

|                          | <b>1998<br/>July - December</b> | <b>1999 ASHIP<br/>July - December</b> |
|--------------------------|---------------------------------|---------------------------------------|
| <b>Total Inspections</b> | <b>218</b>                      | <b>505</b>                            |
| <b>Total Violations</b>  | <b>283</b>                      | <b>749</b>                            |
| <b>Serious</b>           | <b>30</b>                       | <b>136</b>                            |
| <b>Non-serious</b>       | <b>253</b>                      | <b>613</b>                            |
| <b>Total Penalties</b>   | <b>\$78,520</b>                 | <b>\$349,410</b>                      |
| <b>Average Penalty</b>   | <b>\$277.45</b>                 | <b>\$466.50</b>                       |

## 2. Consultation Activities

### a. Outreach Presentations

During October through December of 1998, 1 outreach presentation was conducted in agriculture that affected 65 employers and 150 employees. During October through December of 1999, 3 additional presentations were conducted and affected 140 employers and 7,600 employees.

### b. Publication Development and Dissemination

During October through December of 1999, nearly 9,000 (English and Spanish) **ASHIP** publications were distributed statewide to agricultural employers and employees. Most were distributed through the Consultation offices, direct mailing and during seminars and presentations.

In addition, over 14,911 **Farm Labor Contractor Health and Safety Guides** were also distributed as part of the ASHIP educational outreach effort.

During July through December of 1999, using the presentation binders, workers comp representatives gave five presentations that affected over 300 employers and 6000 employees. In addition, over 900 Cal/OSHA publications that included IIP Model Programs, FLC guides and ASHIP were distributed during these presentations.

In addition, thousands of news letters informing agricultural

employers and workers of ASHIP and other outreach efforts were distributed statewide by various agriculture associations, workers comp carriers and brokers.

### 3. Efficacy

Assessment of overall efficacy for ASHIP 1999 will be accomplished by means of measuring:

- a. The percentage change in fatal and non-fatal injuries in establishments included in agricultural Standard Industrial Classification (SIC) Codes from 1998 (entire year) to 1999 (entire year); and
- b. The percentage change in non-fatal injuries in establishments included in agricultural SIC Codes from 1998 to 1999.

It is not possible to measure efficacy in any smaller time period than a calendar year.

The California Census of Fatal Occupational Injuries (CFOI) indicates that in 1998, 62 fatal injuries occurred in agriculture (24 in crop production, 5 in livestock production and 33 in agricultural services). Data for CFOI for 1999 fatal injuries is currently being collected and will be available in the fall of 2000. An addendum to the 1999 ASHIP Report will be made at the October 2000 Cal/OSHA Advisory Committee Meeting.

For nonfatal injuries, the California Survey of Nonfatal Occupational Injuries and Illnesses indicates that in 1998, 30,200 total occupational injury and illness cases with lost workdays occurred in 1998 (10,600 in agricultural crop production and 19,600 in agricultural services). Data for the California Survey of Nonfatal Injuries and Illnesses is currently being collected and will be available in early 2001. An addendum to the 1999 ASHIP

Report will be made at the January 2001  
Cal/OSHA Advisory Committee.

## **IV. ASHIP AS A SPECIAL EMPHASIS PROGRAM**

### **A. Special Emphasis Programs in General**

A Special Emphasis Program is one in which the Division determines that enforcement and/or consultative resources should be focused on a particular industrial activity or hazard in order to achieve important programmatic goals, e.g., elimination of hazards which cause fatal and non-fatal injuries and illnesses to California workers.

Based on the Division's experience with the performance of the initial 90-day ASHIP (July through October 1999), and the 180-day extended-ASHIP (July through December 1999), the Division of Occupational Safety and Health determined in early 2000 that ASHIP would be an effective year round enforcement and consultative special emphasis program.

### **B. ASHIP Special Emphasis Program**

#### **1. ASHIP Special Emphasis Program**

As stated in Section I, the agricultural production industry is one of the most hazardous industrial activities in California (along with mining, construction, and manufacturing). Despite the large number of hazards present in agriculture, Cal/OSHA receives relatively few complaints from agricultural employees. Since Cal/OSHA is a complaint and accident-driven system (because of statutory mandates and resource scarcity), Cal/OSHA invests proportionately less enforcement resources in agricultural production activities than it does in other hazardous industries.

An effective program is needed to focus available resources into conducting programmed enforcement and consultation in the agricultural production industry as opposed to relying on complaints to trigger enforcement in problem areas, or to rely on employer requests for consultation, to focus consultative

assistance.

ASHIP has demonstrated, in its 90-day and extended 180-day phases, to be an effective way to focus scarce enforcement and consultative resources on the elimination of agricultural workplace safety and health hazards.

2. Additional ASHIP Hazard Focus

In addition to the previous five hazards which were a part of the 90-day and 180-day ASHIP, electrical hazards were added as an emphasis area for the ASHIP SEP. Many serious injuries and fatalities are caused by agricultural equipment, such as ladders and heavy machinery, coming into contact with live electrical wires or power transmission lines.

3. Duration

The Division plans to conduct ASHIP enforcement and consultative activities in calendar year 2000 and report on the results in early 2001.

## **V. 1999 AGRICULTURAL ENFORCEMENT SUMMARY**

### **A. 1999 Total Agricultural Inspections by Selected IMIS Code**

#### **1. Coded Categories for 1999 Inspections**

##### **a. "FieldSan"**

In 1999, the Cal/OSHA Enforcement Unit conducted 935 inspections that were coded "FieldSan" in the Federal OSHA Integrated Management Information System (IMIS).

##### **b. "SIC" Code**

In 1999, the Cal/OSHA Enforcement Unit conducted 1143 enforcement inspections that fell into the following Standard Industrial Classification Codes (SIC) for Agriculture:

0111-0191 -- Cash Grains, Field Crops, Vegetables, Fruits and Horticultural Specialties;

0711-0724 -- Soil Prep and Crop Services; and

0761 - 0762 -- Farm Labor and Management Services.

##### **c. "S13 TIPP"**

In 1999, the Cal/OSHA Enforcement Unit conducted 606 inspections that were coded "S13 TIPP" in the Federal OSHA Integrated Management Information System (IMIS).

d. "S19 SAG"

In 1999, the Cal/OSHA Enforcement Unit conducted 505 inspections that were coded "S19 SAG" in the Federal OSHA Integrated Management Information System (IMIS).

S-19 SAG was the code selected in July under which all ASHIP inspections would be coded (means "summer Ag inspections). These inspections were coded for the ASHIP and represented the total inspections conducted in agriculture during the July-December period of time.

2. Non-Mutually Exclusive IMIS Entry Code Categories

In 1999, a single inspection that involves an agricultural establishment or worksite can be coded using more than one IMIS code. Therefore, the total of inspections conducted in 1999, adding inspections for each of the four IMIS Codes ("FieldSan," "SIC," "S13 TIPP" and "S19 SAG") is 3189. However, since inspections can be multiply coded, this additive figure overestimates the total number of inspections conducted by an unknown factor. For purposes of the 1999 ASHIP Report, a factor of three has been selected. The more accurate estimate of the total number of non-overlapping IMIS Coded inspections would be 1063.

The IMIS Entry Code Category that most accurately represents the total number of mutually exclusive agricultural inspections conducted in 1999, then, is "SIC." A total of 1143 enforcement inspections were conducted in agriculture in 1999.



**B. 1999 Total Violations, Violations by Classification and Total Penalties by Inspection Code Category**

1. "FieldSan"

For the 935 agricultural inspections coded "FieldSan," there were 1135 violations issued (198 serious and 937 other-than-serious) and \$457,540 in civil penalties were proposed.

2. "SIC"

For the 1143 agricultural inspections coded "SIC" (0111-0191; 0711-0724 and 0761-0763), there were 1434 total violations-- 311 serious and 1123 other-than-serious (regulatory or general)--issued and \$824,750 in civil penalties were proposed.

3. "S13 TIPP"

For the 606 agricultural inspections coded "S13 TIPP," there were 954 violations issued (136 serious and 818 other-than-serious) and \$311,045 in civil penalties were proposed.

4. "S19 SAG"

For the 505 agricultural inspections coded "S19 SAG," there were 749 violations issued (136 serious and 613 other-than-serious) and \$349,410 in civil penalties were proposed. See Section V.C. and Table Four for detail by ASHIP hazard.

**TABLE THREE**

**TOTAL 1999 AGRICULTURAL INSPECTIONS, VIOLATIONS  
AND PENALTIES BY OVERLAPPING IMIS CODES**

|                              | "Field<br>San"   | "SIC"            | "S13 TIPP"       | "S19 SAG"        |
|------------------------------|------------------|------------------|------------------|------------------|
| <b>Total<br/>Inspections</b> | <b>935</b>       | <b>1143</b>      | <b>606</b>       | <b>505</b>       |
| <b>Total<br/>Violations</b>  | <b>1135</b>      | <b>1434</b>      | <b>954</b>       | <b>749</b>       |
| <b>Serious</b>               | <b>198</b>       | <b>311</b>       | <b>136</b>       | <b>136</b>       |
| <b>Non-<br/>Serious</b>      | <b>937</b>       | <b>1123</b>      | <b>818</b>       | <b>613</b>       |
| <b>Total Penalties</b>       | <b>\$457,540</b> | <b>\$824,750</b> | <b>\$311,045</b> | <b>\$349,410</b> |

**C. 1999 Total ASHIP Violations, Violations by  
Classification and Total Penalties by ASHIP  
Hazard (Exclusive of Non-ASHIP Violations)**

**1. Machinery and Tractor Hazards**

For the 505 ASHIP agricultural inspections in 1999, there were 56 violations issued for machinery and tractor hazards involving 8 CCR Sections 3328, 3440, 3441 and 3653.

Of the 505 ASHIP inspections, 41 employers, or 8% of employers inspected, were not in compliance with the Title 8 sections related to machinery and tractor hazards.

Of these 56 violations, 34 (61%) were classified as serious and 22 (39%) were classified as general. \$86,190 in civil penalties were proposed for these 56 violations (average penalty is \$1,539.11).

**2. Field Sanitation Hazards**

For the 505 ASHIP agricultural inspections in 1999, there were 270 violations issued for field sanitation hazards involving 8 CCR Section 3457. Of the 505 ASHIP

inspections, 195 employers, or 39% of employers inspected, were not in compliance with 8 CCR Section 3457.

Of these 270 violations, 46 (17%) were classified as serious and 224 (83%) were classified as general or regulatory. \$127,070 in civil penalties were proposed for these 270 violations (average penalty is \$460.59).

### 3. Heat Stress Hazards

For the 505 ASHIP agricultural inspections in 1999, there were 56 violations issued for heat stress hazards involving 8 CCR Section 3457(c)(1) and (c)(4). Of the 505 ASHIP inspections, 50 employers, or 9% of employers inspected, were not in compliance with 8 CCR Section 3457(c)(1) and (c)(4).

Of these 56 violations, 19 (34%) were classified as serious and 37 (66%) were classified as general or regulatory. \$36,960 in civil penalties were proposed for these 56 violations (average penalty is \$660.00).

### 4. Musculoskeletal Injury Hazards

For the 505 ASHIP agricultural inspections in 1999, there were 11 violations issued for musculoskeletal hazards involving 8 CCR Sections 3456. Of the 505 ASHIP inspections, 11 employers, or 2% of employers inspected, were not in compliance with Title 8 Sections involving musculoskeletal injury.

Of these 11 violations, 2 (18%) were classified as serious and 9 (82%) were classified as general or regulatory. \$3,260 in civil penalties were proposed for these 11 violations (average penalty is \$296.36).

## 5. Skin Disorder Hazards

For the 505 ASHIP agricultural inspections in 1999, there were 4 violations issued for skin disorder hazards involving 8 CCR Sections 3364, 3366 and 3384. Of the 505 ASHIP inspections, 4 employers, or approximately 1% of employers inspected, were not in compliance with Title 8 Sections involving skin disorders hazards. Of these 4 violations, 1 (25%) were classified as serious and 3 (75%) were classified as general or regulatory. \$1,649 in civil penalties were proposed for these 4 violations (average penalty is \$412.25).

**TABLE FOUR**

**1999 ASHIP VIOLATIONS AND PENALTY SUMMARY BY HAZARD  
BASED ON 505 INSPECTIONS CONDUCTED FROM JULY TO  
DECEMBER (EXCLUSIVE OF NON-ASHIP HAZARDS)**

|                                     | <b>Employers<br/>Not-in-<br/>Compliance</b> | <b>Total<br/>Violations</b> | <b>Serious</b> | <b>Other-than-<br/>Serious</b> | <b>Total<br/>Penalties</b> |
|-------------------------------------|---------------------------------------------|-----------------------------|----------------|--------------------------------|----------------------------|
| <b>Machinery<br/>&amp; Tractors</b> | 41 (8%)                                     | 56                          | 34             | 22                             | \$86,190                   |
| <b>Field<br/>Sanitation</b>         | 195 (39%)                                   | 270                         | 46             | 224                            | \$127,070                  |
| <b>Heat Stress</b>                  | 50 (9%)                                     | 56                          | 19             | 37                             | \$36,960                   |
| <b>Musculo-<br/>Skeletal</b>        | 11 (2%)                                     | 11                          | 2              | 9                              | \$3,260                    |
| <b>Dermal</b>                       | 4 (1%)                                      | 4                           | 1              | 3                              | \$1,649                    |

#### **D. Overall ASHIP Efficacy**

Assessment of overall efficacy for ASHIP 1999 will be accomplished by means of measuring:

1. The percentage change in fatal and non-fatal injuries in establishments included in agricultural Standard Industrial Classification (SIC) Codes from 1998 (entire year) to 1999 (entire year); and
2. The percentage change in non-fatal injuries in establishments included in agricultural SIC Codes from 1998 to 1999.

It is not possible to measure efficacy in any smaller time period than a calendar year.

The California Census of Fatal Occupational Injuries (CFOI) indicates that in 1998, 62 fatal injuries occurred in agriculture (24 in crop production, 5 in livestock production and 33 in agricultural services). Data for CFOI for 1999 fatal injuries is currently being collected and will be available in the fall of 2000. An addendum to the 1999 ASHIP Report will be made at the October 2000 Cal/OSHA Advisory Committee Meeting.

For nonfatal injuries, the California Survey of Nonfatal Occupational Injuries and Illnesses indicates that in 1998, 32,300 total occupational injury and illness cases with lost workdays occurred in 1998. Data for the California Survey of Nonfatal Injuries and Illnesses is currently being collected and will be available in early 2001. An addendum to the 1999 ASHIP Report will be made at the January 2001 Cal/OSHA Advisory Committee.

One short-term measure of efficacy of enforcement activities is the proportion of employers not-in-compliance with selected Title 8 occupational safety and health standards.

See Section V.C. above for an enumeration of the proportion of employers inspected who were "non-in-compliance" with specific Title 8 safety orders pertaining to each of the ASHIP hazards.

Overall, approximately 301 of the employers inspected in 505 ASHIP inspections from July to December, or 60%, were not-in-compliance with ASHIP Hazards. In 2000-2001, ASHIP will strive to achieve a 20% decrease in the overall "not-in-compliance ratio" for ASHIP Hazards.